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**FROM: Winston Hsu, PATENT AGENT, REG. NO. : 41,526**

**SERIAL NO.: 10/605,716**

**ATTORNEY DOCKET NO.: MTKP0050USA**

**SUBJECT: INFORMATION DISCLOSURE STATEMENT**

**TOTAL PAGES: 12PAGES (INCLUDING COVER PAGE)**

**Winston Hsu 2004/08/26**

**MTKP0050USA0\_D1\_1**

PTO/SB/97 (08-03)

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**APPLICATION NUMBER:** 10/605,716

**PAPERS INCLUDED:**

(1) Transmittal Form	1 PAGE
(2) Fee Transmittal	1 PAGE
(3) Information Disclosure Statement	8 PAGES

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/605,716	
	Filing Date	10/21/2003	
	First Named Inventor	Li-Chun Tu	
	Art Unit	2186	
	Examiner Name		
Total Number of Pages in This Submission	10	Attorney Docket Number	MTKP0050USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Winston Hsu, Reg. No.: 41,526
Signature	<i>Winston Hsu</i>
Date	8/26/2004

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name			
Signature		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (10-03)

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**FEE TRANSMITTAL  
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$ ) 0.00**Complete if Known**

Application Number	10/605,716
Filing Date	10/21/2003
First Named Inventor	Li-Chun Tu
Examiner Name	
Art Unit	2186
Attorney Docket No.	MTKP0050USA

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

Deposit Account Number	50-3105
Deposit Account Name	North America Intellectual Property Corp.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$ ) 0.00</b>

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 86	2201 43	Independent claims in excess of 3	
1203 290	2203 145	Multiple dependent claim, if not paid	
1204 86	2204 43	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>			<b>(\$ ) 0.00</b>

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or relapse)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$ ) 0.00**SUBMITTED BY**

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886289237350
Signature	<i>Winston Hsu</i>	Date	8/26/2004		

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PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

5 Applicant(s): Li-Chun Tu

Ping-Sheng Chen

Pao-Ching Tseng

Hung-Cheng Kuo

Filing Date: 10/21/2003 Art Unit: 2186

10 App. No.: 10/605,716 Docket No.: MTKP0050USA

Title: PROCESSOR HAVING AN UNSHARED STACK MEMORY

15 To: Commissioner for Patents  
P.O. BOX 1450  
Alexandria, VA 22313-1450

Subject: Information disclosure statement under 37 CFR  
20 §1.56.

Dear Sir/Madam:

25 This is an Information Disclosure Statement in  
accordance with the duty to disclose information  
material to patentability under 37 CFR §1.56. The  
applicants wish to make of record the documents listed  
on the accompanying form PTO/SB/08. It is respectfully  
requested that the examiner initials the cited  
30 reference on the form and that it be made of record  
in the application and that a copy of the initialed  
form be sent to the applicants with the next

communication from the examiner.

Since the IDS is filed before the mailing date of a first Office action on the merits, a petition to request  
5 consideration of the information disclosure statement is hereby requested according to 37 CFR §1.97(b). To comply with 37 C.F.R. §1.97(e), which states that each item of information contained in the information disclosure statement was first cited in any  
10 communications from a foreign application not more than three months prior to the filing of the information disclosure statement, the reference document contained in the information disclosure statement was first cited in the communication from the Taiwan Intellectual  
15 Property Office on June 17, 2004 for a counterpart foreign application. The applicants sincerely hope that the examiner can consider the items contained in this IDS.

20 According to the requirement set forth in 37 CFR §1.98 and MPEP 609, the applicants are submitting a copy of the cited paragraph 3-2 from a reference book (published Sep. 1, 1999). The reference document describes the data transfer instructions of the MCS-51  
25 (a well-known 8051 processor manufactured by Intel®) instruction set, such as MOV, MOVC, and MOVX. Since the data transfer instructions are well known to anyone skilled in the art, the lengthy description is omitted for the sake of brevity.

30

The independent claim 1 is repeated as follows.

1. A processor comprising:  
a central processing unit (CPU) processing data  
according to an instruction set;  
a data memory storing non-stack data;  
5 a **stack memory storing stack data**;  
a memory address generator producing addresses for  
accessing the data memory; and  
a **stack pointer generator producing pointers for**  
accessing the stack memory.

10

As one can see, the cited reference fails to teach  
how to use the memory space of the stack memory instead  
of the internal data memory when the instructions (e.g.  
the instructions CALL and RETURN) need to use a stack  
15 for storing data. Therefore, it is believed that the  
cited reference fails to teach all of the limitations  
in claim 1 of the present invention.

20 Respectfully Submitted,

Winston HsuDate: 8/26/2004

25 Winston Hsu, Patent Agent No.41,526

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(Please contact me by e-mail if you need a telephone  
30 communication and I will return your call promptly)